

#### File No. 3AM-GRA1015 / Amendment No. 1

December 23, 2014

John Kusugak, Regional Director, Kivalliq Region Government of Nunavut, Department of Community and Government Services P.O. BAG 002, GN, Rankin Inlet, NU X0C 0G0 Joe Acorn, P.Eng Project Manager Stantec Architecture Ltd. 4910 53 Street, P.O. Box 1777 Yellowknife, NWT X1A 2P4

Email: JKusugak@gov.nu.ca Email: Joe.Acorn@stantec.com

Subject: Licence No. 3AM-GRA1015 – Hamlet of Rankin Inlet;

Amendment No. 1 – Seasonal Replenishment of Nipissar Lake

Dear Mr. Kusugak and Mr. Acorn,

Please find attached, Amendment No. 1 to Licence No. 3AM-GRA1015 Type "A" issued to the Government of Nunavut, Community and Government Services (GN-CGS or Licensee) and as issued by the Nunavut Water Board (NWB) (Motion 2014-23-P10-03) pursuant to its authority under Article 13 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada and the Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA).

The terms and conditions of the original Licence related to the use of Waters and deposit of Waste remain an integral part of this approval. Please note that the Amendment as issued, must be approved by the Minister of Aboriginal Affairs and Northern Development Canada pursuant to s. 56 of the NWNSRTA and accordingly, the NWB has forwarded the issued Amendment to the Minister for his consideration under a separate cover.

The NWB recommends that the Licensee consult the accompanying "Reasons for Decision Including Record of Proceedings" and all comments received by interested persons on the Application during the licensing process.

Sincerely,

Thomas Kabloona Nunavut Water Board

Chair

TK/kk/pb

Enclosure: Licence No. <u>3AM-GRA1015 – Amendment No. 1</u>

Comments - AANDC, DFO

Cc: Distribution - Kivalliq

# NUNAVUT WATER BOARD



# 3AM-GRA1015 Type "A" LICENCE AMENDMENT No. 1

Licensee: GOVERNMENT OF NUNAVUT,

DEPARTMENT OF COMMUNITY AND GOVERNMENT SERVICES

Licence Issued: June 9, 2010 Minister Approval of Licence: July 28, 2010

Licence Expiry: May 31, 2015

Amendment No. 1 Issuance: December 23, 2014

Pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, with respect to an application for an amendment dated August 14, 2012 (with additional information provided on October 6, 2012 and August 12, 2013), made by Stantec Architecture Ltd. on behalf of the Government of Nunavut, Community and Government Services for the Hamlet of Rankin Inlet's Municipal Type "A" Water Licence 3AM-GRA1015, and the Reasons for Decision issued by the Nunavut Water Board following the Public Hearing held with respect to the Application, the Nunavut Water Board hereby issues Amendment No. 1 to Licence 3AM-GRA1015 as follows:



# NUNAVUT WATER BOARD WATER LICENCE 3AM-GRA1015 - AMENDMENT NO.1

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

<del></del>	DATE.		
Thomas Kabloona, Nunavut Water Board Chair	APPROVED BY:	Minister of Aboriginal Affairs and Northern Development Canada	
This Licence Amendment No	.1, issued and recorded	at Gjoa Haven, Nunavut on December 23, 2014.	
Expiry of Licence:	MAY 31, 2015		
License Issuance:	JUNE 9, 2010		
Quantity of Water use not to Exceed:	2,330 CUBIC METERS PER DAY FROM NIPISSAR LAKE, 3,485 CUBIC METERS PER DAY FROM CHAR RIVER TO NIPISSAR LAKE		
Purpose:	USE OF WATERS		
Classification:	MUNICIPAL UNDERTAKING		
Location:	RANKIN INLET, KIVALLIQ REGION, NUNAVUT LATITUDE 62°49'24'' N, LONGITUDE 92°06'53'' W		
Water Management Area:	WILSON WATERSHED (13)		
Licence Number/Type:	3AM-GRA1015 TYF	PE "A"	
hereinafter called the Licen		divert or otherwise use Water or dispose of d conditions contained within this Licence	
(Mailing Address)	ICHNICH HALLI, MOI	WYVET AGE GGG	
	BAG 002, GOVERNN RANKIN INLET, NUN		
(Licensee)			
GOVERNMENT OF N	UNAVUI, COMMUN	ITY AND GOVERNMENT SERVICES	

# PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

#### 2. Definitions

# Amend "Water Supply Facilities"

"Water Supply Facilities" means the areas and associated infrastructure at the Char River exiting the Lower Landing Lake including the water intake and pipeline extending from the Char River to Nipissar Lake as described in the Application for Water Licence Amendment dated August 14, 2012 and associated documents; Nipissar Lake including intake lines, pump-houses, underground pipeline and the Williamson Lake water tank.

# PART C: CONDITIONS APPLYING TO WATER USE AND MANAGEMENT

#### Insert

Item 11

The Licensee shall submit to the Board for approval in writing, prior to March 31, 2015, a Water Pumping Adaptive Management Plan, that shall include the following:

- a. Details of seasonal hydrological monitoring of Char River;
- b. Details of Char River, Lower Landing Lake and Nipissar Lake water chemistry monitoring and assessment of impacts on Nipissar Lake water quality/chemistry due to the transfer of water from Char River;
- c. In-stream flow objectives for Char River including a flow based low cut-off limit of 10% of the instantaneous flow and 0.5m minimum flow depth in the Char River, at which point no further Water is authorized to be withdrawn from the Char River;
- d. Details of Char River on-going viability assessment in meeting pumping objectives and water use requirements;
- e. Mitigation options and procedures for occurrences when flow is insufficient to meet pumping objectives and consumption requirements.

#### Insert

Item 12

The Licensee may, withdraw fresh Water from the Char River, exiting the Lower Landing Lake at Monitoring Station GRA-6, and pump to Nipissar Lake annually in accordance with the approved Water Pumping Adaptive Management Plan as submitted under Part C, Item 11.

#### Insert

Item 13

The daily quantity of Water pumped from the Char River to Nipissar Lake shall not exceed three thousand, four hundred and eighty-five (3,485) cubic metres per day, to be withdrawn in accordance with the approved Water Pumping Adaptive Management Plan, as submitted under Part C, Item 11. Withdrawal of water shall not exceed 10 % of the instantaneous flow of Char River.

#### Insert

Item 14

The Licensee shall submit to the Board for approval in writing, a revised Water Pumping Adaptive Management Plan, within ninety (90) days of completion of the 2015 hydrological field study, to include actual field flow data analysis. The Licensee shall annually review the Water Pumping Adaptive Management Plan and modify it as necessary. Revised Plans shall be submitted to the Board within the Annual Reports.

### Insert

Item 15

The Licensee shall cease water pumping activities from Char River to Nipissar Lake should the In-stream flow objectives for Char River, as per the Water Pumping Adaptive Management Plan and restrictions imposed in Part C, Item 13, not be met.

# PART F: CONDITIONS APPLYING TO OPERATIONS AND MAINTENACE

#### Amend

Item 1

The Board has approved the Plan entitled "Addendum to Operations and Maintenance (O&M) Plan for the Water Supply Facility, Char River, Rankin Inlet, Nunavut", prepared for the Government of Nunavut, Department of Community and Government Services, by Stantec Architecture Ltd., dated May 2014.

#### Amend

Item 3

The Board has approved the Plan entitled "Spill Contingency Plan for Water Supply and Sewage Treatment Facilities Rankin Inlet, Nunavut", prepared for: the Government of Nunavut, Department of Community and Government Services, by Stantec Architecture Ltd., dated May 2014.

# PART H: CONDITIONS APPLYING TO THE MONITORING PROGRAM

# Amend

Item 1

The Licensee shall maintain Monitoring Program Stations at the following locations:

Monitoring Program Station Number	Description	Frequency	Status
GRA-1	Raw water supply from Nipissar Lake prior to treatment	Daily, Monthly, Annually; Annually (spring freshet)	Active (Volume) (Quality)
GRA-2	Point of discharge in Prairie Bay (within 20	Quarterly	Inactive (Quality)

	m of discharge pipe outfall approximately 5 m below the surface)		
GRA-3	Effluent discharge from Sewage Treatment Facility	Quarterly	Active (Quality)
GRA-4	Sludge removed from the Sewage Treatment Facility	Monthly	Active (Volume)
GRA-5	Water level gauge in Nipissar Lake	Monthly (during periods of open water)	Active (Water Level)
GRA-6	Char River Water pumped to Nipissar Lake	Daily, Monthly, Annually; Annually (spring freshet)	New (Volume/Quality)
GRA-7	Lower Landing Lake	Annually (spring freshet)	New (Water Quality)

#### Amend

Item 2

The Licensee shall measure by instrument and record in cubic metres, the daily, monthly and annual quantities of Water extracted for all purposes at Monitoring Program Station GRA-1, and from the Char River exiting Lower Landing Lake at Monitoring Program Station GRA-6.

## Insert

Item 13

The Licensee shall, during water pumping activities from Char River to Nipissar Lake, record daily the total Water flow within the Char River to ensure the Licensee adheres to the Part C, Items 13, 14 and 15 of the Licence, and "Framework for Assessing the Ecological Flow Requirements to Support Fisheries in Canada", (DFO 2013, or more recent).

#### Insert

Item 14

The Licensee shall sample annually during spring freshet, at Monitoring Program Stations GRA-1, GRA-6 and GRA-7 and analyze for the following parameters in accordance with the Canadian Council of Ministers of the Environment (CCME, 2013) Water Quality Guidelines for the Protection of Freshwater Aquatic Life:

pH Conductivity
Total Suspended Solids Ammonia Nitrogen
Nitrate – Nitrite Oil and Grease (visual)
Total Phenols Sulphate
Total Hardness Total Alkalinity
Sodium Potassium
Magnesium Calcium

Chloride Total Cadmium
Total Copper Total Chromium
Total Iron Total Lead
Total Mercury Total Nickel

Total Zinc Total Phosphorous
Total Aluminum Total Manganese
Total Cobalt Total Arsenic

Total Petroleum Hydrocarbons (TPH)

Benzene, Toluene, Ethylbenzene, Xylene (BTEX)

All remaining terms and conditions of Licence 3AM-GRA1015 Type "A" dated June 9,2010 shall continue to apply.